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Article

Sustainable Entrepreneurship in the Western Balkan Countries: Key Constraints

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Abstract

Public concern about environmental issues has led to growing interest in sustainability across various sectors, including entrepreneurship. However, beyond the concern for environmental protection and the preservation of natural resources for future generations, additional conditions are necessary to foster the development of sustainable entrepreneurship. While developed countries provide examples and evidence of the successful implementation of this concept, its application in developing countries presents challenges due to a range of limiting factors. In addition to essential financial support, the literature often highlights the lack and/or complexity of sustainability reporting, the absence of standards and clearly defined sustainability metrics, insufficient regulation, and the lack of support from higher education institutions as barriers to the transition toward sustainable entrepreneurship. This paper aims to examine the feasibility of applying the concept of sustainable entrepreneurship in Western Balkan countries, taking into account the aforementioned constraints. For the purpose of the empirical research, potential limitations were evaluated by managers and business owners in Albania, Bosnia and Herzegovina, North Macedonia, and Serbia. The results of the study answer the question of whether developing countries have the potential to foster sustainable entrepreneurship, given the analyzed constraints, or whether the implementation of this concept is reserved solely for large enterprises and economically advanced countries.

Keywords: sustainability; sustainable entrepreneurship; development; innovation; Western Balkans

1. Introduction

Traditionally, entrepreneurship has been studied, analyzed, and applied as a mechanism for generating self-employment or as one of the drivers of job creation (Sarango-Lalangui et al., 2018). In other words, it has primarily been viewed as a means of stimulating economic development, while social and environmental issues were often overlooked. However, the increasing importance of environmental challenges and the emergence of the concept of sustainable development highlight that entrepreneurship should not be based solely on wealth creation but can also serve as a mechanism for guiding economic sectors toward sustainability (Terán-Yépez et al., 2020). This has motivated the emergence of a new concept—sustainable entrepreneurship.

Sustainable entrepreneurship is “a process in which entrepreneurs leverage opportunities in an innovative way for economic gain, social equity, environmental quality, and cultural preservation on an equitable basis” (Koe et al., 2014). According to Schaltegger and Wagner (2011), this concept represents a strategic business model in which companies implement sustainable practices to boost efficiency and maintain competitiveness, all while addressing the environmental, economic, and

social consequences of their actions (Rosário et al., 2022). Sustainable entrepreneurs move away from standard production techniques, conventional products, established market systems, and typical consumption habits, opting instead for environmentally friendly and socially responsible solutions that offer improved outcomes.

The concept of sustainable entrepreneurship aims not only to contribute to the sustainable development of the organization itself but also to the broader sustainable development of markets and society, which requires significant sustainable innovations (Schaltegger & Wagner, 2011). These innovations should resolve conflicts between ecosystems and economic systems. Therefore, achieving sustainable growth through sustainable entrepreneurship depends on innovation capacity (Urbaniec, 2015; Sun et al., 2020; Terán-Yépez et al., 2020). A key constraint to the implementation of sustainable entrepreneurship in developing countries stems from a lack of financial support. However, while some authors link the realization of sustainable innovations to the availability of financial resources (Malen & Marcus, 2017; Polzin, 2017; Sun et al., 2020), others hold different views. Lee et al. (2018) found that the implementation of sustainable innovations by entrepreneurs also depends on research and development as well as human capital in energy and resource management. From this perspective, achieving sustainable growth also relies on entrepreneurs' innovation capabilities (Terán-Yépez et al., 2020). Garrette et al. (2009) contend that sustainable innovation and design do not solely depend on new technologies, but instead involve reimagining strategies for growth that reduce harmful environmental and social consequences. Thus, innovation can be considered a key factor for sustainability, which may refer to both product and process innovations. Since innovation is intrinsic to entrepreneurship (Terán-Yépez et al., 2020), both forms are seen as mechanisms for achieving sustainable development goals (Richnák & Gubová, 2021).

Despite research showing that innovation is not always contingent upon access to financial resources, this limitation continues to appear in many studies. Their findings suggest that the adoption of the sustainable entrepreneurship concept is restricted in developing countries and within SMEs. Moreover, the literature highlights that, alongside financial constraints, developing countries face additional challenges such as the lack of sustainability reporting, absence of standards and metrics, regulatory gaps, and insufficient support from higher education institutions. The extent to which these barriers hinder the application of sustainability principles in developing countries remains an open question. To address this, a study was conducted among a group of enterprises from the Western Balkans.

2. Literature Review

In developing countries, even a marginal increase in entrepreneurship can lead to significant economic growth. The number of entrepreneurs in these countries is typically suboptimal, making the encouragement of entrepreneurship critical for economic development (Watson et al., 2023). However, while small businesses, particularly entrepreneurs, grow rapidly in developing countries, their exact numbers are not easily accessible due to unreliable or unavailable reports and statistics (Azmat & Samaratunge, 2009).

Providing incentives for business startups, especially in "green" sectors, would contribute to sustainable development (Youssef et al., 2018). Although sustainable entrepreneurship can positively impact a sustainable economy, the extent of this impact will vary depending on the economic conditions of each country or region (Iqbal et al., 2020). Therefore, the question arises: what are the realistic chances for the development of sustainable entrepreneurship in developing countries? Furthermore, it is known that sustainable practices are not inherently present in small businesses and entrepreneurs. One key feature of sustainable entrepreneurs in developing countries is that most are driven by economic motives. Entrepreneurs in these countries are generally unaware of the importance of maintaining a good reputation, networking with stakeholders, building trust, and customer loyalty due to low levels of education and awareness, which undermines their social capital and explains their lack of responsible entrepreneurship (Azmat & Samaratunge, 2009). Additionally, corporate social responsibility (CSR) is typically associated with large enterprises, as small businesses

and entrepreneurs do not implement CSR practices in terms of financial reporting, codes of conduct, procedures, strategies, and structures (Azmat, 2013). In this context, McWilliamson et al. (2006, p. 317) argue that the concept of CSR cannot be applied to small and medium-sized enterprises (SMEs) because they are “heterogeneous, with traits related to size, resources, management style, and personal relationships,” making it difficult to adopt practices from large firms (Azmat, 2013). For example, Koe et al. (2014) found that, in Malaysia, it was mainly large enterprises that reported sustainability practices. Vives (2006) discovered that medium and large firms are more likely to engage in socially responsible activities than smaller firms. Murillo & Lozano (2006, p. 229) also argue that “the larger the firm, the more CSR is implemented.” Larger firms tend to proactively implement sustainable practices (Iqbal et al., 2020; Soto-Acosta et al., 2016), while small businesses and entrepreneurs see sustainable practices as a novelty.

Small and medium-sized enterprises (SMEs) and entrepreneurs are economic drivers in developing countries but face numerous challenges and constraints (Maksimov, Wang & Luo, 2017; Anbumozhi et al., 2018). One of these is access to finance. Sustainable businesses often require significant initial investments in research and development, as well as in sustainable production methods and materials. Additionally, there is a lack of institutional support for sustainable entrepreneurship in many developing countries (Azmat, 2013; Terán-Yépez & Batlles-de-laFuente, 2023; Shahid, 2023). Governments and policymakers should strengthen policies to reduce environmental pollution (Sun et al., 2020) and, more importantly, define green finance policies that will encourage future eco-entrepreneurs to establish ventures with an environmental focus, promote the use of eco-friendly products with a smaller negative impact on the environment, and achieve sustainable development (Terán-Yépez et al., 2020). Therefore, on one hand, it is necessary to improve access to sustainable finance by providing microfinance loans or investments with a social impact, specifically targeted at sustainable entrepreneurs, as well as creating tax incentives and other financial instruments that encourage investment in sustainable SMEs (Sun et al., 2020; Terán-Yépez et al., 2020). On the other hand, institutional support must be provided. Governments and institutions can create policies and regulations that support sustainable business models and provide training and support to entrepreneurs interested in sustainable entrepreneurship (Terán-Yépez et al., 2020; Watson et al., 2023). This includes educating the population about climate change and various existing ecological problems to raise awareness about sustainability, organizing forums to educate people on the use of environmentally friendly products like solar systems and various renewable energy sources, and investing efforts in strengthening trade policies among countries and other regions for the import/export of innovative technologies to balance economic development and sustainable environmental protection (Sun et al., 2020).

The increase in publications on sustainable entrepreneurship indicates the importance and relevance of the topic. Since 1992, when two papers on this topic were published, the greatest surge occurred between 2015 and 2018, when 147 papers were published. However, the fact that authors with the highest number of publications in this area are from the United States, Canada, Germany, and Romania does not mean that authors from developing countries are uninterested in the topic, but rather that there are no adequate reports on sustainable entrepreneurship in those countries, which would facilitate easier tracking, analysis, and discussion of the issues (Sarango-Lalangui et al., 2018; van Oorschot et al., 2024). Jain and Tripathi (2022) also recognize the lack of reports on sustainable entrepreneurship, noting the reasons for this problem and emphasizing that it exists both in developing and developed countries. The authors De Micco et al. (2021) attempt to address this issue in their study by finding ways to resolve it.

The lack of a theoretical framework in the field of sustainable entrepreneurship, especially when it comes to measuring sustainable business practices, poses a significant challenge. Issues such as measurement standards, performance indicators, and measurement mechanisms remain unresolved (Büyükközkán & Karabulut, 2018; Ramanathan & Isaksson, 2023). Furthermore, authors find that the increasing number of standards only complicates conclusions (van Oorschot et al., 2024).

The role of higher education institutions can be particularly significant in promoting sustainable entrepreneurship. Academic institutions play a leading role in providing training in sustainable entrepreneurship (Decamps et al., 2017; Dentchev et al., 2018; Olalla & Merino, 2019). Training in sustainable entrepreneurship, in addition to enhancing skills, helps in building new connections that can assist entrepreneurs in their careers (Kummitha & Kummitha, 2021). Studies based on sustainable entrepreneurship training emphasize that such training helps improve the self-efficacy of emerging entrepreneurs and aids in launching businesses with a social purpose (Kummitha & Kummitha, 2021).

Despite the contextual limitations in developing countries, it is possible to achieve sustainable development without a trade-off between poverty reduction and environmental sustainability (Azmat, 2013; Sun et al., 2020). Sustainable entrepreneurship can be applied equally in small and medium-sized enterprises (Youssef et al., 2018; Sun et al., 2020; Kummitha & Kummitha, 2021), both at the start of a venture or later, after a certain period (Kummitha & Kummitha, 2021). This win-win outcome is possible through innovative approaches and creative thinking by social entrepreneurs who, instead of being hindered by contextual constraints, act as catalysts for sustainable development. To examine the feasibility of implementing sustainable practices, managers and business owners assessed the specific constraints inherent in developing countries. Based on the defined objective, the following research questions were highlighted:

QR1: Are there differences in the assessment of sustainable entrepreneurship constraints among Western Balkan countries?

QR2: Are the constraints for implementing sustainable entrepreneurship equally rated regardless of the company size?

3. Research Methodology – Sample Structure, Definition of Variables, and Hypotheses

This research is the outcome of activities carried out within the project *Up-skilling Researchers for Sustainable Entrepreneurship Based on Innovation Process Management (USE IPM) - HORIZON-WIDERA-2022-TALENTS-03-01*, funded by the European Union. During the period from February to March 2025, a questionnaire was developed and subsequently used for data collection. Data were collected in the developing countries represented by the project participants (Faculty of Economics, University of Niš; University of Tirana; University of Banja Luka; Ss. Cyril and Methodius University in Skopje): Serbia, Albania, Bosnia and Herzegovina, and North Macedonia. The research covers a sample of 100 enterprises, with 25 questionnaires collected from each widening country. The following tables describe the sample composition. Of the total number of enterprises in the sample, the majority are small enterprises (43), followed by medium-sized (32), and large enterprises (25).

Table 1. Sample structure by country and company size.

Country	Frequency	Size	Frequency
Serbia	25	Large	25
Albania	25	Medium	32
Bosnia and Herzegovina	25	Small	43
North Macedonia	25	Total	100
Total	100		

Source: own.

Taking into account the analyzed literature, the following hypotheses were formulated:

H1: *The limitations to sustainable entrepreneurship are equally present across the countries of the Western Balkans.*

H2: *Larger enterprises in the countries of the Western Balkans have greater potential to implement sustainable practices.*

Based on the literature review, key elements necessary for the easier and faster implementation of sustainable practices were identified. These elements are simultaneously recognized as major limitations in developing countries and include: support from higher education institutions, financial support programs, the establishment of regulations and policies, the definition of standards and measures, and the availability of sustainability reports.

Respondents evaluated the significance of these limitations on a scale from 1 to 5. These evaluations represent the dependent variables in the study. To address the research questions and test the hypotheses, the independent variables considered are the country of origin of the surveyed enterprises and their size.

4. Research Results

Table 2 presents the average importance ratings of the mentioned constraints, along with the dispersion of responses, regardless of the country of origin and company size. It can be observed that, within the analyzed sample, the most significant constraints are the Lack of regulations and policies (4.21) and the Lack of sustainability standards and measures (4.22). These constraints also show the lowest response dispersion (0.78 and 0.77, respectively).

Table 2. Descriptive statistics of tested variables.

Constraints	Mean	Std. Deviation
Lack of support from higher education institutions	4.10	.847
Lack of financial support programs	4.18	.857
Lack of regulations and policies	4.21	.782
Lack of sustainability standards and measures	4.22	.773
Unavailability of sustainability reports	4.08	.849

Source: own.

When considering the country of origin, the results show that in Albania and North Macedonia, the most significant constraint is the **lack of sustainability standards and measures** (Albania 4.36 and North Macedonia 4.32), while the **lack of regulations and policies** is rated as the least significant constraint (Albania 4.04 and North Macedonia 4.08). However, this latter constraint represents the most significant limitation in Bosnia and Herzegovina and Serbia (4.28 and 4.44, respectively).

Table 3. Average ratings by country.

Country	Albania		Bosnia and Herzegovina		North Macedonia		Serbia		Total	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Lack of support from higher education institutions	4.08	.702	4.04	.978	4.16	.800	4.12	.927	4.10	.847
Lack of financial support programs	4.12	.781	4.24	.779	4.20	.913	4.16	.987	4.18	.857
Lack of regulations and policies	4.04	.841	4.28	.737	4.08	.862	4.44	.651	4.21	.782
Lack of sustainability standards and measures	4.36	.757	4.04	.935	4.32	.748	4.16	.624	4.22	.773
Unavailability of sustainability reports	4.16	.850	4.08	.909	4.08	.812	4.00	.866	4.08	.849

Source: own.

Testing the significance of differences in responses, i.e., examining the influence of the country of origin on the assessment of the importance of the mentioned constraints, involved the use of analysis of variance (ANOVA). However, after examining the assumptions required for applying this parametric test, it was concluded that ANOVA could not be applied to the available data. Therefore, its non-parametric alternative, the Kruskal-Wallis test, was used instead. This test evaluates whether independent groups share similar average ranks. Rather than relying on the original data values, each observation is replaced by its rank, and these ranks are then analyzed to assess if the groups come from identical distributions. In essence, the test checks if the medians of the groups are equal.

Table 4. Kruskal Wallis test's results.

	Lack of support from higher education institutions	Lack of financial support programs	Lack of regulations and policies	Lack of sustainability standards and measures	Unavailability of sustainability reports
Chi-Square	.281	.412	3.736	2.694	.451
df	3	3	3	3	3
Asymp. Sig.	.963	.938	.291	.441	.929

Source: own.

The significance level obtained from the applied test indicates that there is no statistically significant difference in the perceived importance of constraints among the analyzed countries. This finding supports the first research hypothesis, which states that the limitations of sustainable entrepreneurship are equally present across the Western Balkan countries.

Table 5. Average ratings by company size.

Size	Large		Medium		Small		Total	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Lack of support from higher education institutions	4.36	.860	3.94	.914	4.07	.768	4.10	.847
Lack of financial support programs	4.28	.891	4.22	.906	4.09	.811	4.18	.857
Lack of regulations and policies	4.28	.678	4.09	.856	4.26	.790	4.21	.782
Lack of sustainability standards and measures	4.48	.586	4.16	.847	4.12	.793	4.22	.773
Unavailability of sustainability reports	4.24	.926	4.00	.916	4.05	.754	4.08	.849

Source: own.

When considering the size of the company, the **Lack of sustainability standards and measures** was identified as the most significant constraint for large enterprises (4.48). For medium-sized enterprises, the **Lack of financial support programs** was rated as the most critical constraint (4.22), while for small enterprises, the **Lack of regulations and policies** was considered the most significant (4.26).

The significance of differences in the perceived importance of constraints based on company size was tested using the Kruskal-Wallis test. The results of this test are presented in the following table.

Table 6. Kruskal Wallis test's results (company size).

	Lack of support from higher education institutions	Lack of financial support programs	Lack of regulations and policies	Lack of sustainability standards and measures	Unavailability of sustainability reports
Chi-Square	4.877	1.476	.767	3.455	2.044
df	2	2	2	2	2
Asymp. Sig.	.087	.478	.681	.178	.360

Source: own.

Based on the test results, company size does not have a statistically significant effect on the assessment of the importance of the identified constraints, as the observed significance levels for each constraint exceed the predefined threshold of 0.05.

Table 7. Kruskal Wallis test's results (company size and country).

Country	Statistics	Lack of support from higher education institutions	Lack of financial support programs	Lack of regulations and policies	Lack of sustainability standards and measures	Unavailability of sustainability reports
Albania	Chi-Square	2.733	2.035	1.689	.295	.048
	df	2	2	2	2	2
	Asymp. Sig.	.255	.362	.430	.863	.976
North Macedonia	Chi-Square	2.237	2.732	.022	1.111	1.647
	df	2	2	2	2	2
	Asymp. Sig.	.327	.255	.989	.574	.439
Serbia	Chi-Square	.677	1.967	1.305	2.343	1.199
	df	2	2	2	2	2
	Asymp. Sig.	.713	.374	.521	.310	.549
Bosnia and Herzegovina	Chi-Square	5.408	1.716	1.158	6.054	1.862
	df	2	2	2	2	2
	Asymp. Sig.	.067	.424	.561	.048	.394

Source: own.

A more detailed analysis of the significance of differences revealed that in Bosnia and Herzegovina, the importance of constraints does in fact depend on the size of the enterprise. Specifically, in this country, the **Lack of sustainability standards and measures** was identified as the most significant constraint for large enterprises (average score of 5.00), while at the same time, it was rated as the least significant by small enterprises (average score of 3.69). The importance of specific constraints in Bosnia and Herzegovina, observed by enterprise size, is presented in the following table.

An examination of the perceived importance of constraints in Bosnia and Herzegovina reveals that differences in evaluations also exist across other constraints when considering enterprise size. However, these differences are less pronounced for the remaining constraints. Nevertheless, these findings contradict the second research hypothesis. Specifically, given the limited resources of small and medium-sized enterprises, it was assumed that they would face greater challenges with the identified constraints. However, the results indicate that large enterprises in Bosnia and Herzegovina actually assign greater importance to these constraints.

Table 8. Evaluation of Constraints' Importance in Bosnia and Herzegovina.

Size	Parameters	Lack of support from higher education institutions	Lack of financial support programs	Lack of regulations and policies	Lack of sustainability standards and measures	Unavailability of sustainability reports
Large	Mean	5.00	4.67	4.67	5.00	4.67
	Std. deviation	0.000	.577	.577	0.000	.577
Medium	Mean	4.00	4.33	4.33	4.22	4.11
	Std. deviation	1.225	.866	.707	.972	1.054
Small	Mean	3.85	4.08	4.15	3.69	3.92
	Std. deviation	.801	.760	.801	.855	.862
All	Mean	4.04	4.24	4.28	4.04	4.08
	Std. deviation	.978	.779	.737	.935	.909

Source: own.

5. Conclusions

The growing interest in sustainable entrepreneurship has led to an increase in the number of scientific research papers on the topic, as well as a shift in business practices among a significant number of market actors. However, since market actors are considered one of the causes of environmental degradation, they are also expected to play a more active role in addressing environmental challenges (Iqbal et al., 2020). It is certain that the availability of both material and immaterial resources will influence the rate at which the concept of sustainability is adopted by all stakeholders, particularly entrepreneurs and small and medium-sized enterprises (SMEs). Nevertheless, given the importance of this field in preserving resources for future generations and its potential as a source of competitive advantage, it is unlikely that this process will come to a halt. Accordingly, it is necessary to identify key economic-level constraints and take appropriate steps to eliminate or at least mitigate their effects.

The findings presented in the paper reveal a high level of consensus among research participants regarding the constraints involved in implementing sustainability within the business sector. It was clearly established that the Western Balkan countries face all the identified constraints typically associated with adopting the sustainability concept, and that these constraints significantly affect the direction of implementation in the region under study. However, the authors were unable to provide an answer to the second research question.

The fact that the second hypothesis was not confirmed indicates that, in the developing countries covered by the study, SMEs and large enterprises face the examined constraints in the process of implementing sustainability to an equal extent. This outcome may be explained by the fact that all analyzed enterprises, regardless of size, operate within the same geographical region, where the level of national development equally influences all sample participants.

Furthermore, the results regarding the assessment of the importance of constraints in Bosnia and Herzegovina, which show that large enterprises rate all constraints higher to varying degrees compared to small and medium-sized enterprises, give the impression that small and medium-sized enterprises in this country do not adequately address the issue. It would be incorrect to conclude that these constraints have less impact on this latter group. It is more likely that small and medium-sized enterprises, operating in an environment insufficiently oriented toward sustainable business practices, tend to underestimate the importance of this concept and, consequently, assign lower importance to the constraints they face.

This raises the question of whether the results would differ if enterprises from developed countries were included in the analysis—specifically, whether respondents would assess the identified constraints differently. Therefore, there is a need for future research on the identified constraints among SMEs and large enterprises in developed countries as well. In other words, it implies involving USE IPM academic and non-academic partners from developed countries in testing these constraints across both small and medium-sized and large enterprises.

A key limitation of this study lies in its reliance solely on the perceptions, attitudes, and beliefs of business owners and managers, which introduces a significant degree of subjectivity. Additionally, testing the proposed hypotheses on a larger sample would enhance the precision and validity of the results (Soto-Acosta et al., 2016).

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